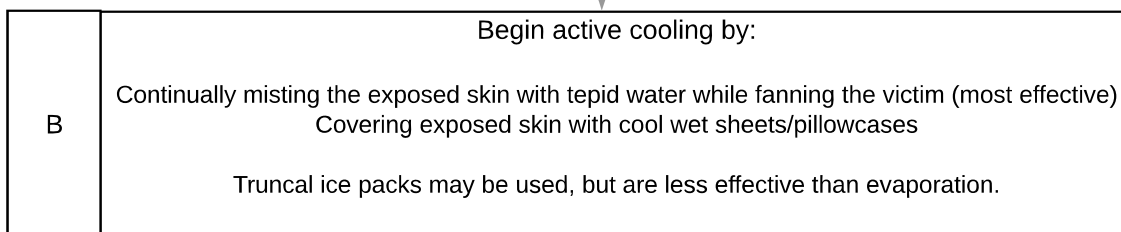
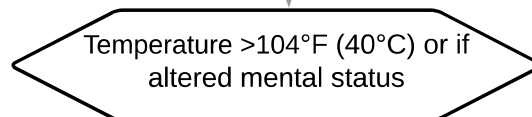
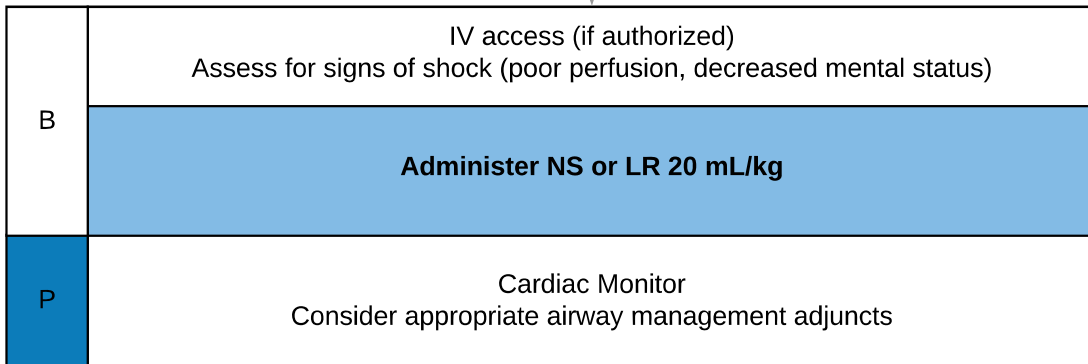
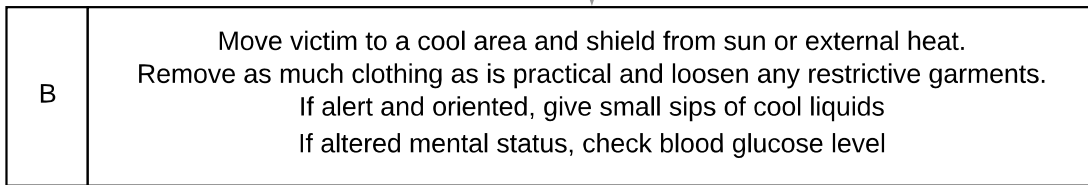
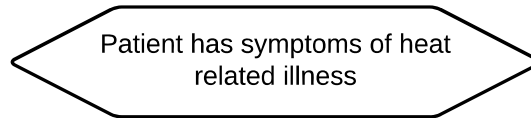


Hyperthermia Administrative Guideline



History <ul style="list-style-type: none"> • Ambient temperature • Medications/drugs • Exertion level • Time of exposure to heat • Attire • Fluid intake 	Signs and Symptoms <ul style="list-style-type: none"> • Flushed • Dry or sweaty • Muscle cramps • Nausea/vomiting • Tachycardia/hypotension/poor perfusion • Elevated temperature • Altered mental status 	Differential <ul style="list-style-type: none"> • Heat cramps • Heat edema • Heat exhaustion • Heat Syntope • Heat stroke • Stimulant drug use • Fever/sepsis • Dehydration • Medication adverse reaction
---	---	---





Education/Pearls

Heat-related illness is a spectrum of disease that occurs when the body's thermoregulatory system does not work properly. Heat-related illness most often affects athletes (exertional hyperthermia), but can also occur during the warm weather months or in locations with extreme temperatures. Patients with impaired thermoregulation (those at extremes of age, the obese or mentally ill) are at higher risk. The definitive treatment for heat-related illness is total body cooling.

Heat (Muscle) Cramps

- Heat cramps are minor muscle cramps usually in the legs and abdominal wall.
- Temperature is normal.

Heat Exhaustion

- Heat exhaustion has both salt and water depletion usually of a gradual onset.
- As it progresses tachycardia, hypotension, elevated temperature, and very painful cramps occur.
- Symptoms of headache, nausea and vomiting occur.
- Heat exhaustion can progress to heat stroke.

Heat Stroke

- Heat stroke occurs when the cooling mechanism of the body (sweating) ceases due to temperature overload and/or electrolyte imbalances.
- Temperature is usually > 104 F.
- When no thermometer is available, it is distinguished from heat exhaustion by altered level of consciousness.

Treatment for heat related illness

- In mild cases of hyperthermia, treatment is supportive. Removing the patient from a heated environment is the first intervention, followed by passive cooling measures such as removing clothing and fanning air across the skin.
- Besides ice water immersion, evaporation (mist and fan) is the most rapid way to cool a patient.
- Ice packs to the groin, axilla, neck, and areas near other great vessels have been shown to be less effective.
- Monitor the skin if applying ice packs for prolonged periods. The skin is susceptible to damage with prolonged exposure to ice. Covering ice packs with a sheet and adjusting the site can mitigate this.
- Hydration orally or intravenously can help restore water balance quickly
- For patients who have signs and symptoms of hypovolemic shock, volume replacement is indicated